

TABLE 1 - LIMITS FOR AIR CONTAMINANTS
Occupational Exposure Limits Adopted by the Navy

Substance	Navy Adopted Occupational Exposure Limits							
	TWA			STEL (d)		CEILING		Skin Designation
	ppm (a)	mg/m ³ (b)	f/cc (c)	ppm (a)	mg/m ³ (b)	ppm (a)	mg/m ³ (b)	
Diesel Fuel Marine (DFM) (e)	-	350	-	-	1000	-	-	-
JP-5 (e)	-	350	-	-	1000	-	-	-
JP-8 (e)	-	350	-	-	1000	-	-	-
Synthetic Vitreous Fibers/Man-Made Vitreous Fibers (f)								
Continuous filament glass fibers (g)	-	-	1	-	-	-	-	-
Continuous filament glass fibers (h)	-	5	-	-	-	-	-	-
Glass wool fibers (g)	-	-	1					
Rock wool fibers (g)	-	-	1	-	-	-	-	-
Slag wool fibers (g)	-	-	1	-	-	-	-	-
Special purpose glass fibers (g)	-	-	1	-	-	-	-	-
Refractory ceramic fibers (g)	-	-	0.2	-	-	-	-	-

- a. Parts of vapor or gas per million parts of contaminated air by volume at 25 degrees C and 760 torr.
- b. Milligrams of substance per cubic meter of air. When entry is in this column only, the value is exact; when listed with a ppm entry, it is approximate.
- c. Fibers of substance per cubic centimeter of air.
- d. Duration is for 15 minutes, unless otherwise noted.
- e. NEHC ltr 6261 Ser 34/2514 of 9 Apr 92 (NEHC & the NAVOSH Standards Update Board) as amended by National Research Council, Committee on Toxicology, *Permissible Exposure Levels for Selected Military Fuel Vapors*, National Academy Press, Washington, DC, 1996. Available at <http://www.nap.edu/catalog/9133.html>.
- f. American Conference of Governmental Industrial Hygienists (ACGIH) 2001 Threshold Limit Values (TLVs®) for Chemical Substances and Physical Agents and Biological Exposure Indices (BEIs®).
- g. Respirable fibers: length > 5 µm; aspect ratio ≥ 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase contrast illumination.
- h. Inhalable fraction. Inhalable Particulate Mass (IPM) for those materials that are hazardous when deposited anywhere in the respiratory tract. IPM consists of those particles that are captured according to the following collection efficiency regardless of sampler orientation with respect to wind direction:
- IPM (d_{ae}) = $0.5[1 + \exp(-0.06 d_{ae})]$ for $0 < d_{ae} \leq 100 \mu\text{m}$ where: IPM (d_{ae}) = the collection efficiency and d_{ae} = aerodynamic diameter of particle in µm.